DOCUMENT RESUME

ED 301 205 IR 052 548

AUTHOR Neroda, Edward W.
TITLE Campus Information Policy Analysis.
PUB DATE 88
NOTE 18p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Freedom; *Academic Libraries; Access to Information; Copyrights; Educational Technology; Higher Education; *Information Dissemination; *Library Planning; *Policy; Privacy; Questionnaires; Shared Resources and Services; Surveys; Technological Advancement; Telecommunications; *Values
IDENTIFIERS Eastern Montana College; Vendors

ABSTRACT

This document reports the results of a study undertaken to explore the extent to which integration or convergence of campus information services was reflected in policy, with the goal of discovering whether or not such an analysis might possibly reveal instances where policy did not promote organizational goals. Investigated were information policies generated or adhered to by a number of departments at Eastern Montana College: courier services, the radio station, printing services, the bookstore, the communication center, audiovisual services, the library, and the computer center. A generic, open-ended questionnaire was used to survey key personnel in these units. Analysis of the data indicated that: (1) the evolution of policy, both oral and written, was affected and influenced by many external and internal forces (discussed in the paper); (2) while there were many commonalities among the various information handling departments, these did not insure uniform or consistent responses to similar issues; (3) the desire for improved communication to facilitate the use of existing resources was greater than the need for integration; (4) no policy appeared to be greatly at variance with organizational goals; and (5) policy integration appeared only at the executive level of the academic hierarchy. (7 footnotes) (CGD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED301205

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Campus Information Policy Analysis

Study Background and Introduction

Breslin and others have noted that while the human mind reigns supreme as the ultimate tool for the creation, dissemination and preservation of knowledge, it is being immeasurably enhanced by technology.(1) Campus information professionals, such as librarians, computer center personnel, and telecommunications staff are particularly aware of the potential of technology to greatly improve access and the utilization of all manner of knowledge. These specialists also are aware that the job of delivering the required information to various student and faculty constituencies is a complex one which requires sustained effort and incurs seemingly ever-increasing costs. They also recognize that, because of rising costs, operations under their jurisdiction require ongoing fiscal scrutiny.

Campus information services review their operations as a part of a broader effort to coordinate and cooperate with endeavors aimed at meeting institutional goals. Manifestations of this process have been recently distilled into a set of issues surrounding the convergence, integration or merger of the two primary campus information providers: the library and the computer center. The general topic has become the subject of numerous articles, commentary and surveys attempting to define trends' (2) Interest in this issue extends beyond the boundaries associated with the professional literature of these two fields and into publications which survey broad issues in American higher education. Among others, Neff (3), Jones (4), and Molholt (5), have outlined the apparent strengths and weaknesses associated with newly proposed relationships and structures within campus departments charged with serving the information needs of the academic community. Already, a newsletter has been launched by the Journal of Academic Librarianship which seeks to facilitate communication on campuses where information service convergence is occurring.

This study sought to review the apparent process of information system integration by investigating the various information policies generated or adhered to by those college departments engaged in supplying information-related services.

Evidence of a growing convergence of campus information services should eventually manifest itself in policy. In addition, it was felt that such an analysis might reveal points of common concern forming a basis for cooperative ventures or resource sharing. A more precise understanding of the academic community's information needs and use characteristics should also emerge. By comparing operational policy with the institution's goals and values, a greater congruence between theory and practice might be achieved. Conflicting policies or policy not promoting organizational goals could be reevaluated

Study Process and Environment

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Edward W. Neroda
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR052548

Population characteristics and the nature of the study issues did not lend themselves readily to statistical analysis. More important was the desire to analyze information service departments as a single entity operating within an information continuum as defined below. An understanding of the issues was thought to be best conveyed by an unstructured approach where interviews and existing documentation might reveal shared interests and concerns. This open, qualitative approach would allow those interviewed to more easily relate and discuss their oral and written policies within the context of both professional and institutional values.

Survey Development

The initial step in the process of developing a survey involved identifying the major campus information policy issues. This was followed by a review of the recent appropriate studies of higher education administration, together with the professional literature associated with the various campus information specialists. This exercise revealed a limited body of published materials germane to the study. The majority dealt with the library/computer center merger concept; however, other useful articles reviewed national and international information policy and telecommunications issues. Operations as diverse as bookstores, media centers, radio and television departments were represented in the literature.

This material was reviewed in order to develop an understanding of each area's perception of information policy. Tangential concerns which might be explored in depth during the interview phase of the study were also collected. With this foundation, a generic questionnaire was developed. It was designed to serve as a guide for the interviews which were anticipated to be fairly open-ended. Where it was foreseen that responses to the initial issues might be complex, supplemental lists of questions were developed for selected interviews.

Site

Eastern Montana College was host for the study. The researcher interviewed key personnel in the following units: courier services, radio station, printing services, the bookstore, the communications center, audio visual services, the library and the computer center. In the larger units such as the computer center, several individuals were interviewed. Characteristically, dialogues were held over a two-day period with each session lasting approximately an hour.

Located in Billings, Montana, the college is a publicly-funded four year institution offering graduate and undergraduate degrees to approximately 4,000 students. Programs are offered in the professional fields of business and education. The School of Arts and Science supports a typical array of liberal arts programs.

Definitions and Assumptions

Achleitner and Hale have noted that definitions are a preliminary means of capturing observations, issues, ideologies and problems. They are

the blocks from which we build shared meanings.(6) Certain concepts require such definition at this point.

An Information Continuum

Social scientists have placed information on a par with land, labor, and capital as being one of the most basic resources. Information exists in a continuum. At a generative level, it commences with the creation of information. The next level involves the replication, distribution or storage of information. Following this, we have the actual utilization of knowledge through the processes of analysis, evaluation and eventual modification. The final phase is analogous to the first or generative stage. This project surveyed those campus units involved with the college's information continuum: from the radio station as creator and distributor, to printing services as replicator, distributor.

Integration

We may well remember the second half of this decade as a period when the velocity of integration of campus information services greatly increased. The causes of this phenomenon have been discussed and relate to the increased volume of information being created and utilized throughout society and perhaps more dramatically within academe.

Diverse campus professionals have been charged with the development and management of the informaiton-related services. Generally they have recognized the need to develop a more harmonious coordination of their operations with one another.

Academic computing professionals are concerned with moving away from a largely technical orientation to a public services operation while managing ever greater arrays of hardware, software, and files. Other campus information providers such as printing services, or a television center are only peripherally aware of the integration issue because of the highly specialized nature of their operations.

More commonly, it is the top tier of university administration that is interested in a process of integration of campus information handling agencies. Senior management routinely experiences pressures to streamline and centralize services. Long range or multicampus efforts relating to the introduction of new telecommunications systems, or enhanced academic and non-academic computing facilities tend to focus their attention on the issue. Integration among campus information providers is occasionally characterized by the merger of the computer center and the library administrative structures.

While there are several interpretations of this phenomenon, for the purposes of this study the integration movement is best defined as a condition of closer cooperation between the various campus departments charged with meeting information need. As Richard Dougherty recently noted, we are learning that we all " ... have complementary skills that are in short supply..." and that by working together we "should become a powerful influence in the reshaping of research and scholarship in

higher education." (7)

Policy

For those of us who work in bureaucracies, the word policy has come to mean various things. In a hierarchical organization, policy as understood by the loftiest tier is often a written document which outlines a particular course of action. Ideally, such policy has been developed utilizing a process which endeavors to pass through the following phases:

1. Identify a specific problem to be resolved
2. Clarify institutional goals as they relate to the issue
3. Develop options and information upon which to base policy
4. Assess alternative policy outcomes
5. Select appropriate option
6. Establish policy review mechanism

In academe, formal policy development can be an enormously complex undertaking involving task forces, committees, councils, senates and considerable additional paraphernalia. Academic departments, divisions, schools, colleges all can point to policy, be it special entrance requirements to an honors program, faculty access to travel funds, or rules governing genetic research. Regulations and procedures are frequently formal and in written format.

In its most flexible form, policy has no physical presence. Rather, it resides in the oral tradition of an organization. It is at this level that policy and procedure merge. This study concerned itself with policy existing in both the oral and written traditions.

Values

It is assumed that effective and sustainable policy ultimately must reflect overall institutional values. In order to analyze an organization's information policy, one must first develop an understanding of the institution's overall value system. How various information services have responded and interpreted such values forms the basis for policy analysis.

The concept of academic freedom is the foundation of higher education and forms the basis for its value system. If a policy issued from a random sector of academe is at variance with this concept in all its complexity, there is more than a fair chance that there will develop an opposition to its continued existence.

Academic freedom attempts to promote reason by establishing an environment which allows a degree of free inquiry. In evaluating ideas, there is an effort at some point to separate a given notion or point of view from the individual or group from which it originated. An atmosphere of free inquiry is encouraged by allowing a degree of privacy for the scholar or student. While most members of the academic community may understand the need for computer security measures or the reluctance of libraries to reveal the contents of circulation data files as a function of state or federal law, ultimately, such policies

are better understood within the context of academic freedom.

Findings and Observations

The study sought to determine if evidence of information service integration existed on a particular campus. It was suspected that information policy would reveal a communality of interests which, in turn, were drawing together the various service agencies. The identification of policies which were illustrative of value conflicts, was also anticipated.

Information Continuum and Policy

Key personnel in the campus information agencies were interviewed for the project: radio station operations, postal and courier services, the bookstore, telecommunications operations, the library, audio-visual services, and the computer center. The degree varied to which these agencies were involved with the several phases of the information continuum. All departments were heavily occupied with the replication, transmission or storage of information. In contrast, there were considerable differences between those information services that dealt with the creative phase of the continuum. Here, the computer center, audio-visual services, the radio station, and the library were found to be more directly related to the creation of knowledge than the balance of departments. Those campus services that functioned within more than one sector of the continuum also tended to have a greater body of policy.

Academic Freedom

Information policy is evolving in response to various concerns found within higher education, the first of which involves the value system associated with the concept of academic freedom. It forms the primary impetus for the foundation of the policy. The essence of higher education remains as a realm of the mind where there is a sanctity in the pursuit of knowledge. Colleges and universities grant their communities a right to relatively unhindered exploitation of the world of ideas and the extension of the boundaries of knowledge. Students and faculty are guaranteed a measure of anonymity in this pursuit. There is the belief that ideas will be judged on their own merits and not mainly according to the nature of their creator or current advocate. Ownership and the conditions of defining legal or appropriate use of a creative endeavor form yet another link to the greater values of academic freedom. Plagiarism and copyright are additional categories of concern.

Off-Campus Realities

Despite the ivory tower image, persons who have had the opportunity to make contributions to American higher education know that, while society has conferred upon us special privileges, we are still subject to its complex socio-economic superstructure. Inevitably, campus information policy must respond to this fact. Within this tier, policy has evolved in response to strong external forces. Ubiquitous

inflation immediately comes to mind as a phenomenon with which all campus information agencies must deal to varying degrees. The bookstore and printing services can pass on the continuous rise in costs for information sources and services. In contrast, such entities as the library must absorb the fiscal impact of inflation and are subsequently faced with difficult management decisions.

With the introduction of complex machinery has grown our appreciation of the significance of vendor relations. Marketing practices can affect the evolution and nature of campus information services. Similarly, network and consortium relations function as external sources which impact the various departments.

Sensitivity regarding an institution's relations with its surrounding community often helps to fashion policy. Some business sectors view selected campus departments as competitors in the way that off-campus apartment owners regard dormitory operations. The recent privatization movement together with the trend to contract for services has focused increased attention on the nature of town-gown relations. Information policy has been impacted by this situation. A plethora of legal issues also forms an important external force which shapes policy.

Legal Framework

Federal, state, and local laws together with licenses, contracts, and other legal instruments affect information policy. Legal standards associated with privacy, confidentiality and copyright have differential impacts on campus information services. Information integrity, open record and other freedom of information access legislation also influence policy.

The radio station is subject to Federal Communications Commission rulings. Postal services are governed to a large extent by federal law. Similarly, telecommunications operations are subject to federal, state and local codes. The bookstore must comply with commercial statutes.

Copyright law is an ongoing concern for all campus information agencies excepting courier, postal and telecommunications services. Computer center policy designed to protect intellectual property includes the definition of appropriate program copying and legal use of files. Similar issues are of concern to the library and audio-visual services. Appropriate utilization of national or regional databases is governed by both federal copyright and telecommunications law as well as contract and licensing agreements. Policy also covers legal copying of other media held by library and audio-visual departments. The photocopying of book and journal materials, microform duplication, dubbing video and audio materials, off-air recording, and replication of software are all policy concerns.

Security policies receive special attention by several information agencies. Postal and courier services are sensitive to the integrity of materials in their temporary custody. Telecommunications operations have similar interests in insuring that message transmission is secure

and not subject to distortion or modification. Campus-owned computer-based phone systems are reported to reduce the likelihood of security violations. Computer center security policies are designed to maintain the integrity of all files stored and manipulated on the mainframe and within the various general purpose microcomputer labs. The ubiquitous use of passwords to access files together with the automatic backup routines assure a high degree of security. In cases of file errors due to hardware or software failure or unauthorized use of facilities, backup tapes can retrieve otherwise damaged or lost materials. Such redundant files are stored at different campus sites. Exit control security systems and regulations dealing with the appropriate use of inventory control files reflect similar concerns on the part of the library.

Privacy rights are another aspect of campus information policy. Computer center policy outlines appropriate staff access to faculty and student files, including electronic mail facilities. With the existence of multiple back-up files, the question of appropriate levels of privacy exists.

Other aspects of legal structures which affect campus information policy are more appropriately addressed in other sections below.

Town Gown Relations

The complexity of the relationship between any particular academic institution and the surrounding community will usually be a function of their relative sizes. Large universities in smaller communities will logically have a greater economic and cultural impact than a small college located in a major metropolitan area.

At times, some members of the host community may view one or more of the campus information agencies as competitors for the business generated by members of the academic community. Occasionally, there may even be a concern that the campus is siphoning-off city customers. Theoretically, the radio station could be considered in this manner. In fact, fellow broadcasters regarded the campus station in a collegial fashion. Concerns were voiced about creation of a video library for college recreational purposes when similar facilities were located close to the campus. The college bookstore operations have been unsuccessfully challenged as public sector rivals.

Campus copy and printing services have been repeatedly subjected to criticism from the business community. At the heart of the problem one discovers that, in fact, city firms could undercut college pricing for selected reprographic tasks. An uneasy compromise to the situation occurred with a change in University System policy regarding contracting for off-campus printing to a position more favorable to local businesses.

Campus computer center policy specifically states that it will not knowingly compete with private data processing firms for the private business clientele. However, the facility can provide services to other public agencies and non-profit organizations.

In a positive light, campus information agencies are often viewed not as competitors but as additional resource providers for the community-at-large. The library and audio-visual services long have been regarded in this fashion. At times, the computer center and printing services have donated some of their resources to community businesses or organizations.

Vendor Relations

In the complex environment in which campus information agencies must function, the role of vendors and contractors in the provision of services is growing. Shifts in marketing strategies, discontinuance of a product line, or the introduction of new services all have their impacts.

Services which are largely computer or machine intensive seem to be particularly prone to such off-campus influences. Telecommunication services are provided by a single contractor working under a multi-year agreement. Computer center operations depend heavily on their major vendor. Hardware, software, and maintenance are furnished by a single company.

To an increasing degree, the library, printing and copy services, together with the radio station and audio-visual services must concern themselves with the quality and character of their relations with various high tech suppliers.

Other more traditional examples of the importance of vendors exist. Both in the bookstore and the library, the quality of service provided by subscription agents, jobbers, and others has a considerable impact on operations. Timeliness and accuracy together with discount structures are often seen to be as important as the service itself. In addition, vendor-generated management information is becoming increasingly important to cost-effective management of operations.

Two-tiered pricing and "black market" situations may be among the more unusual examples of vendor impact on information services. Libraries have long expressed concern about being charged a premium for a particular information product. It is now fairly common that scholarly journals carry two subscription rates, one for individuals and organizations and another specifically for libraries. The tendency to engage in two-tiered pricing is clearly a growing problem which reduces a library's ability to serve as a shared resource center.

A sizable number of faculty sell complimentary or sample copy textbooks to agents who subsequently funnel them into used book markets. Such materials often find their way into the campus bookstore. In the words of some publishers, this situation creates a "black market" which increases the tendency of publishing houses to produce new and possibly unneeded editions. The practice also drives up the price of new materials.

Impact of Networks, Systems, Consortia and Associations

Aspects of campus information policy are influenced by the college's membership in various networks, systems and consortia. The radio station's program offerings are bounded by external organizations such as the National Public Radio network. A particularly important service is provided by NPR's legal affairs department. It monitors the evolving spectrum of legal issues and legislative initiatives to which the broadcasting industry is exposed.

The National Association of College Stores assists the campus bookstore in several ways. Vendor performance studies include information regarding price structures, discount and return policies, problem-solving effectiveness and timeliness of services.

The library is significantly affected by its various memberships. The regional library network largely determines the nature of order processing and cataloging. Network-based communications, together with database development and maintenance services are important factors in determining overall library performance. Association with a local health sciences information consortium also impacts operations especially as they relate to database searching and interlibrary loan functions.

The computer center, telecommunications services, the library and printing services are also influenced by virtue of the college's status as a unit of the state university system. Telecommunications planning is a highly centralized function. Most significant decisions are made by the commissioner of higher education or the regents. To a lesser extent, the computer center is similarly constrained. Recurring issues involve hardware and software standardization within the university system. The purchase of such material is subject to a justification and approval process which extends beyond the campus to the state capital.

Increasingly, library planning takes place within the university system context. The decision to join the Western Library Network was a collective one involving all units of the university system. Ongoing efforts exist to coordinate system-wide library collection development efforts. The various campus printing services have engaged in planning efforts to coordinate the flow of work within their operations in order to maximize the utility of hardware available within the state.

Internal, Operational Environment

The greatest amount of policy has evolved in response to local operational concerns and forces. Ideally, such policy develops in harmony with the issues surrounding academic freedom. Marketplace realities and the allocation of limited resources undoubtedly influence policy development. At this level, one finds the various campus information agencies attempting to maximize the usefulness of the resources that have been allocated to them. Implicit in this practice is the need for coordinated efforts to reduce the potential for inappropriate duplication of services. Here policy deals with two general categories of issues: the acquisition of information sources

and the development of information services, together with the allocation of these finite resources.

Information Resource Development

Formal and informal need assessments and analyses of use patterns form the rationale for both service development and acquisition of information sources for shared use. Attempts to define information need are often focused on those campus groups perceived to be primary clients. In this sense telecommunications services may direct their efforts with faculty and support staff in mind rather than the student population. The library may concern itself largely with student information requirements and virtually exclude from its consideration the needs of support staff and administration. The radio station's approach to this issue was found to be unique among the departments covered in that its primary clientele is the community-at-large rather than the campus.

Information need assessments and use analyses may include healthy doses of professional opinion in lieu of statistically verifiable or otherwise "scientific" studies. Formal assessments may generate high quality data; however, a paucity of time for analysis may stifle their usefulness. Conversely, informal studies lacking rigor may fail to gain wide support as a foundation for policy.

Courier and postal services develop an understanding of the campus through informal, direct contact with staff, students and faculty. Telecommunications operations utilize sophisticated questionnaires to measure college satisfaction with phone service and to learn where future enhancements might be directed. This highly automated service's ability to monitor system activity allows the development of a clear and detailed understanding of use patterns. The same is true of computer center operations where auditing systems permit them to study not only which resources are being used but who is using them. This ability to link user identities with the information sources utilized dramatically improves need assessment and use analysis. Copy and printing services can also associate their users with specific services. The library and audio-visual services routinely conduct various use analyses and need assessments in order to better refine collection building practices and service development.

Aside from such local operations research efforts, the radio station subscribes to a national service which assists them in defining the use characteristics of their client-audience. Consultants are frequently utilized to assist the information services in need determination or use analysis.

Advisory committees often play a collaborative role regarding assessments and analyses. The library, computer center, and audio-visual services all had formal standing committees to assist in these efforts. Telecommunications services had their endeavors evaluated by the coordinating entity for the university system, the Commissioner Of Higher Education. A board of directors serves a similar function for the radio station. The bookstore was very

sensitive to student and faculty needs although they worked with no particular advisory group. Their location adjacent to the student union was an asset in this regard.

Often, the governance structures of networks, consortia, and systems played a role in defining need and analysis of use. Such was the case with the library's membership in a health sciences information network and the Western Library Network. To a large extent, radio operations were influenced by memberships in various program distributing or producing groups. University system oversight and review of computer center acquisitions had a similar impact on operations.

Once a given campus information agency has determined the needs of its clientele and how it is utilizing existing resources, the process of building a local collection of information sources and systems can take place. While faculty and staff often act as proxies for the information interests of the student body, increasingly one finds direct requests are received from students themselves. The library, computer center and audio-visual services were all found to process appropriate requests from students. However, the nature and traditions of these three agencies often determined which campus group would most likely request the acquisitions. For example, it was unusual that the library would receive requests from support staff or administrators while this situation was quite common for the computer center.

Information resource collection building priorities varied considerably when arranged along a spectrum consisting of curricular-related information, research sources, administrative information, and recreational materials. Audio-visual services, the bookstore and the library ranged high in support of the curriculum and medium to low in support of research. Serving recreational information needs was low to nonexistent save for radio operations where it ranked as a high priority and in the bookstore where a quantity of popular material was available. In an informal sense the computer center, through the provision of its hardware, also supported recreational information requirements. Computer games are popular within the micro labs. Administrative information needs were best served by the computer center. A majority of locally developed programs were created initially to serve administrative requirements.

Only in the library and to a lesser degree audio-visual services were information resource development policies extensively elaborated, written documents.

Most campus information services had developed measures to deal with the dictates of copyright law, licensing agreements, and other similar measures designed to define the appropriate use of information sources and systems. The bookstore occasionally would broker the production of anthologies of articles as a special service to the faculty. Obtaining copyright clearance was a major initial concern of this program. Printing and copy services were sensitive to copyright as were the library and audio-visual services. Illegal copying of software was a well defined area within the computer center's information policy.

Service Development

As with the development of information collections, campus information agencies variously assessed needs, determined use and consulted with advisory groups and interested parties in order to develop appropriate services.

Often, variations in service philosophies could be distinguished among the departments. Copy and printing services together with postal and courier operations were not engaged in any form of user instruction other than posting or explaining their services. Guiding faculty through the use of a photo-offset printer was determined to be an inappropriate approach to providing quick, low cost replication and publishing services. Within the computer center, one could expect assistance in using software owned or developed by the center. User assistance with unusual software applications mounted on a microcomputer was less common due to staffing limitations.

Telecommunication operations conducted group training sessions on the use of its equipment and resources as did audio-visual services, the library and the computer center. Frequently these instruction-oriented agencies developed written manuals or guides. In the main, the teaching function sought to make students, faculty and other users self-sufficient in their pursuit of knowledge. These areas found it necessary to provide various levels of assistance with the computer-based systems under their jurisdiction. While initial training was routinely provided, users were soon encouraged to consult manuals, tutorial software, or seek phone assistance where appropriate. The library and audio-visual services developed ongoing instructional modules for the array of non-computer hardware associated with their services.

Inventory Control and Privacy

Inventory control practices varied from the library model, which handles tens of thousands of transactions from a collection in excess of 500,000 bibliographic items, to areas such as postal and courier operations which had little idea of the content of its fluid inventory. The bookstore had less than complete control over its stock, largely due to the rapid turnover of its inventory. Other areas such as the computer center had an inventory of acquisitions but little formal control over software not mounted on the mainframe. In a similar fashion, inventory control of microcomputer hardware could identify a specific purchase but not necessarily its current user.

Privacy rights of individuals were carefully maintained by all the information agencies. Despite media attention directed at the intrepid hackers who supposedly can enter any computer-based system, telecommunications and computer center personnel felt that security systems were improving faster than the expertise and financial resources of individuals wishing to circumvent them. Despite the lack of a sophisticated inventory control mechanism with system privacy features, library staff training routines dealt with the importance of this issue.

Postal and courier operations have long regarded confidentiality as a special charge. Printing and copy services were also sensitive to the issue. Only under extraordinary conditions would they release a particular project to someone other than the person who had originated the task.

Retention of Information

Policy regarding the retention of information collections varied. Print shop personnel would regularly return the original copy of reprographic work they performed. Documents deemed of potential lasting value were routinely transmitted to the library for possible inclusion in the college archives.

The computer center retained all records in multiple copies in several campus locations. File deletion protocols judged whether a document should be saved given its length, purpose and frequency of use. The center routinely notified users of deletions and had the ability to recover erased files from backup tapes. Software licensing agreements governed the disposition of those information sources should they no longer be useful due to circumstances such as the introduction of more advanced hardware or new program releases. Locally developed software was found to be in a state of virtually continuous revision due to the changing needs of the campus community or alterations in the machine environment supported by the center.

Retention protocols for library and audio-visual services were outlined in a collection development policy. Procedures were sensitive to the ongoing requirements of the academic community. Faculty and other interested parties were invited to participate in the decision-making process. Staff conducted initial screening of items for removal. Bibliographic records were modified according to the dictates of national standards with little local alteration or additions. The federal government provided the library with policy regarding the removal and disposition of its document depository items. At a very basic level, retention policy was also a pragmatic response to limited physical space.

The bookstore's approach to this issue was unique on campus for several reasons. Policy regarding the return and credit for unsold texts and other information sources varied by vendor. The bookstore itself broadened its relationship with the information marketplace as it purchased used books for later sale or through the promotion of vendor repurchase plans. Postal and courier services also had a retention policy for materials in their custody. Unclaimed information sources or misdirected items were processed largely according to federal and state codes.

Allocation of Resources

While all campus information agencies may understand the need to pursue policies which work towards an equitable distribution of finite resources, they often go about this task in different ways. Pluralism

and flexibility being a part of academe, allocations are often designated according to perceived need; the resources granted to the faculty may vary substantially when compared with those directed to undergraduates.

Allocation mechanisms governing access and distribution of information resources and services existed within all the departments studied. Telecommunications and postal operations deliver a wide array of services, the enjoyment of which is limited only by a particular user's budget. The phone system is not an unlimited gateway to the "invisible college" of a given professional employee. Unless students are associated with a college-sponsored activity with a communications budget, access to the phone system is on a pay-as-you-go basis. Communications charges are sometimes embedded in other services such as the library's database search service.

Some allocation systems involve multi-tier pricing. Copy centers will reproduce materials at a lower cost if the client produces a copy meter rather than cash. Self-service machines are generally the most expensive on campus. The bookstore sells used texts offering students an alternative to the library's reserve room and the high cost of new materials.

Special fees may be associated with certain services. Often new and costly services are viewed as something beyond that which is required and therefore a justification for a charge exists. Such was the case when the library introduced a database search service many years ago. Limited budgets and the disinclination to allocate support away from established programs to new endeavors usually form the basis of information service-related fees. Fee income often exceeds service costs and surpluses are utilized to underwrite other activities. In such a manner, audiotape duplication financed the acquisition of an array of audio-visual hardware. Recent advances in micrographics copying technology have allowed the library to acquire machines which will pay for themselves without the need to raise per copy charges.

Fees may also be utilized to ration an information product. A per-page charge for computer output tends to limit the amount of use microcomputers receive in particular laboratories. The library's practice of passing on all third party costs associated with the searching of selected databases also moderates the use of this service. To a large extent, all campus copy services, whether they be convenience copiers located in the bookstore or the library, ration their product through the use of fees.

Rationing also occurs by limiting the amount of time an individual is given to utilize an information resource. Access to microcomputers and the mainframe is often limited to a specific period of time because of the number of individuals seeking their use. Microcomputer-based indexes in the library are restricted to thirty minutes use per patron. The radio station carefully apportions access to the scarce airtime of this powerful medium. More familiar is the library's reserve reading service with its finite circulation periods rationing scarce information resources.

Allocations also may vary according to a particular member's status within the academic community. Faculty may utilize certain types of audio-visual devices that are not available to students except with a special dispensation. On the other hand, students have priority over faculty when it comes to accessing hardware held within the microcomputer laboratories. Certain computer systems are restricted to faculty and students of a particular school or department.

The use of fines and discounts form an interesting final aspect of information services allocations. The library was the only department which used a fine system in order to enforce its other allocation methods. The bookstore offered discounts to faculty and staff for the purchase of books and other information products or media. This same group has access to cut rate telecommunications services through the state telephone system which students do not enjoy.

Conclusion

The study utilized an open, qualitative approach in order to determine if evidence of campus information service convergence manifested itself in policy. Personnel associated with the computer center, audio-visual services, and the library were most conscious of this trend. To a lesser extent, the other units were aware of the process. The introduction of technological innovation together with fiscal pressures most often prompted this awareness.

Policy reflecting this trend was frequently transmitted through the oral tradition; however, a substantial body of written documents were encountered. The value system associated with academic freedom formed the most fundamental level of stimulus for the development of policy followed by the influence of the off-campus marketplace, and the legal framework. Operational issues related to the internal workings of campus information agencies also affected the evolution of policy.

Policy addressed issues relating to the appropriate use of information, including security and credibility of data. Privacy and confidentiality were topics prompting further elaboration of policy. Security of user-related data files were of concern to telecommunications operations, the library, and computer center.

Socio-economic factors influenced policy. The relationship between the college and its host community impacted campus information policy. Printing services were particularly sensitive to accusations that they were in competition with local enterprises. Marketplace complexities influenced virtually all information agencies. Units charged with developing information resource collections were affected by such things as discount policies, marketing strategies, and management information generated by vendors.

Consortia, networks and other trans-campus associations also impacted information policy. The radio station's membership with the National Public Radio and the library's relationship with networks exemplified this reality.

Internal, operational concerns were of considerable importance in the formation of information policy. The various agencies went about developing resources and services in response to both formal and informal need assessments and use analyses. Advisory committees played significant roles in policy development associated with the computer center, audio-visual services, and the library. While service philosophies varied somewhat, all the campus information agencies undertook to make their operations as self-service oriented as practical. Services routinely sought to protect the privacy rights of individuals. The allocation of information resources and services was flexible, varied, and generally responsive to the pluralistic nature of academe.

The genesis for this study was the desire to explore, on a local level, the extent to which integration or convergence of campus information services was reflected in policy. It was hoped that such an analysis might provide the basis for cooperative endeavors and possibly reveal instances where policy did not promote organizational goals.

The resulting study illustrated many instances of common interest or concern among the various information handling departments. Such communalities did not insure uniform or consistent responses to similar issues. Toleration for such distinctions may be explained by the character of academe which permits higher levels of redundancy and "inefficiency" to exist in order to protect the greater value of academic freedom.

Nor was the need for integration found to be as great as a desire for improved communication to facilitate the use of existing resources. Nowhere did policy seem to be dramatically at variance with institutional goals. Policy integration, where it did occur, was a product of the executive level of the academic hierarchy not covered extensively by this study. The endeavor also presents interested parties with a framework for further investigation.

Footnotes

1.

Richard D. Breslin, "Implementing Computing Planning in a Liberal Arts Setting," EDUCOM Bulletin, (Fall/Winter 1983): 41

2.

David B. Walch, "Academic Library and Computing Service Organization," (San Luis Obispo, California: California Polytechnic State University, Library, 1 Dec 1987): pp. 1-2

3.

Raymond K. Neff, "Merging Libraries and Computer Centers: Manifest Destiny or Manifestly Deranged?," EDUCOM Bulletin, (Winter 1985): pp. 8-12, 16

4.

C. Lee Jones, "Academic Libraries and Computing: A Time of Change," EDUCOM Bulletin, (Spring 1985): pp. 9-12

5.

Pat Molholt, "On Converging Paths: The Computer Center and the Library," Journal of Academic Librarianship, Vol. 11, no. 5., (November 1985): pp.284-288

6.

Herbert K. Achleitner and Martha L. Hale, "Draft Definitions," Emporia State University. School of Library and Information Management. Emporia, Kansas, (4 February 87): p.2

7.

Richard M. Dougherty, "Libraries and Computing Centers: A Blueprint for Collaboration," College and Research Libraries, Vol. 48, no. 4., (July 1987): p.296